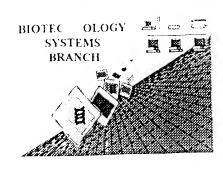
## RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	09/829,631
Source:	OIPE_
Date Processed by STIC:	4-23-01

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: <a href="mailto:patin21help@uspto.gov">patin21help@uspto.gov</a> or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: <a href="mailto:patin3help@uspto.gov">patin3help@uspto.gov</a> or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 3.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

## **Checker Version 3.0**

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST 25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money

Checker Version 3.0 can be down loaded from the USPTO website at the following address: http://www.uspto.gov/web/offices/pac/checker

OIPE

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PATENT APPLICATION: US/09/829,631
                                                         TIME: 13:40:58
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                   Output Set: N:\CRF3\04232001\I829631.raw
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            Monsma, Frederick J.
                                                                          Does Not Comply
             Hamblin, Mark
                                                                      Corrected Diskette Needed
     9 <120> TITLE OF INVENTION: The ST-B17 Serotonin Receptor
    12 <130> FILE REFERENCE: NIH047.1CP1C1
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                                                                            pp 1,5
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    18 <151> PRIOR FILING DATE: 1995-09-18
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    61 <400> SEQUENCE: 5
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    64 <210> SEQ ID NO: 6
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DATE: 04/23/2001

RAW SEQUENCE LISTING

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/829,631

DATE: 04/23/2001 TIME: 13:40:58

Input Set : A:\NIH047.1CP1C1.txt

Output Set: N:\CRF3\04232001\I829631.raw

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/829,631

DATE: 04/23/2001 TIME: 13:40:58

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138         Phe         Val         Leu         Val         Ala         Ser         Gly         Val         Thr         Phe         Phe         Leu         Pro         Ser         Gly         Ala           139         190         190         195         200	1095 1143 155 1191	y Ala g geg n Ala g gaa u Glu 235 t gae	Gly cag Gln ttg	Ser aag Lys	Pro 200 cgc	Leu gcc Ala	Phe gct	Phe ctg		-	ggc	+ 00		175				
138         Phe         Val         Leu         Val         Ala         Ser         Gly         Val         Thr         Phe         Phe         Leu         Pro         Ser         Gly         Ala           139         190         190         195         200	1095 1143 155 1191	y Ala g geg n Ala g gaa u Glu 235 t gae	Gly cag Gln ttg	Ser aag Lys	Pro 200 cgc	Leu gcc Ala	Phe gct	Phe ctg		-	22		aca	ata	ctc	atc	ttt	137
139       190       195       200       200       201       201       201       201       201       201       201       201       201       201       202       202       203       2	1095 1143 165 1191	g geg n Ala g gaa u Glu 235 t gae	cag Gln ttg	aag Lys	200 cgc	gcc Ala	gct	ctg	IIIL		G19					-		
141       atc tge tge tte ace tae tge agg atc ctt ctg get gee ege aag eag eag ge         142       Ile Cys Phe Thr       Tyr Cys Arg Ile Leu Leu Ala Ala Arg Lys Gln Al         143       205	1143 1 1143 5 1191	g gaa u Glu 235 t gac	Gln ttg	Lys	cgc	Ala					Oly	J C 1.	AIU	vai		•u1	TITC	
142       Ile Cys       Phe Thr       Tyr       Cys       Arg       Ile Leu Leu Ala       Ala Arg       Lys       Gln       Al         143       205       c       c       210       c       c       215       c       c       al         145       gtg       caa       gtg       gcc       tcg       ctc       ace       acg       gcd       gcd       gcc       ttg       gc         146       Val       Gln       Val       Ala       Ser       Leu       Thr       Thr       Gly       Thr       Ala       Gly       Gln       Ala       Leu Gl       Gl       Ala       Leu Gl       Ala       Leu Gl       Ala	1143 1 1143 1 1 1191	g gaa u Glu 235 t gac	Gln ttg	Lys		Ala												
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146       Val       Gln       Val       Ala       Ser       Leu       Thr       Thr       Gly       Thr       Ala       Gly       Gln       Ala       Leu       Gl       147       220       230       230       233       23	1 5 2 1191 5	Glu 235 t gac		qcc		215					210					205		143
146       Val       Gln       Val       Ala       Ser       Leu       Thr       Thr       Gly       Thr       Ala       Gly       Gln       Ala       Leu       Gl       147       220       230       230       233       23	1 5 2 1191 5	Glu 235 t gac			caq	qqc	get	acq	gge	acq	acc	ctc	teq	qcc	qtq	caa	qtq	145
147       220       225       230       23       23       23       23       23       24       24       24       24       24       24       24       24       24       245       245       25       250       25       250       25       250       25       250       250       250       250       250       250       250       250       250       250       250       250       250       250       250       250       265	1191	235 t gac		Āla	Gln	Glv	Ala	Thr	Ğĺv	Thr	Thr	Leu	Ser	Āla	Val	Gln	Val	146
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151 240 245 250 250 153 agt agg cgt ctg gcc acc aag cat agc agg aag gcc ttg aag gcc ag 154 Ser Arg Arg Leu Ala Thr Lys His Ser Arg Lys Ala Leu Lys Ala Se 155 255 255 260 260 265 265 265 265 265 265 265 265 265 265			-		-	-			_			-		-	_			
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154       Ser Arg Arg Arg Leu Ala Thr Lys His Ser Arg Lys Ala Leu Lys Ala Ser 155       255       260       260       265																		
155 255 260 265 265 157 ctg acc ctg ggc atc ctg ctg gga atg ttc ttt gtc acc ttg ctg ctg ctg 158 Leu Thr Leu Gly Ile Leu Leu Gly Met Phe Phe Val Thr Trp Leu Pr 159 270 275 280 161 ttc ttt gtg gcc aac ata gct cag gcc gtg ttg gac ttg atc tcc cc 162 Phe Phe Val Ala Asn Ile Ala Gln Ala Val Cys Asp Cys Ile Ser Pr																		
157 ctg acc ctg ggc atc ctg ctg gga atg ttc ttt gtc acc tgg ctg ctg 158 Leu Thr Leu Gly Ile Leu Leu Gly Met Phe Phe Val Thr Trp Leu Proposition 270 275 280 280 161 ttc ttt gtg gcc aac ata gct cag gcc gtg tgt gac tgc atc tcc cc 162 Phe Phe Val Ala Asn Ile Ala Gln Ala Val Cys Asp Cys Ile Ser Proposition 275 280 280 280 280 280 280 280 280 280 280		ı Ser	Ala	_	Leu	Ala	Lys	Arg		His	Lys	Thr	Ala		Arg	Arg	Ser	
158 Leu Thr Leu Gly Ile Leu Leu Gly Met Phe Phe Val Thr Trp Leu Pr $159$ 270 275 280 280 161 ttc ttt gtg gcc aac ata gct cag gcc gtg tgt gac tgc atc tcc cc 162 Phe Phe Val Ala Asn Ile Ala Gln Ala Val Cys Asp Cys Ile Ser Pr				265					260					255				155
159 270 275 280  161 ttc ttt gtg gcc aac ata gct cag gcc gtg tgt gac tgc atc tcc cc 162 Phe Phe Val Ala Asn Ile Ala Gln Ala Val Cys Asp Cys Ile Ser Pr	1287	j ccc	ctg	tgg	acc	gtc	ttt	ttc	atg	gga	ctg	ctg	atc	ggc	ctg	acc	ctg	157
161 tto ttt gtg gee aac ata get eag gee gtg tgt gae tge ate tee ee 162 Phe Phe Val Ala Asn Ile Ala Gln Ala Val Cys Asp Cys Ile Ser Pr	)	ı Pro	Leu	Trp	Thr	Val	Phe	Phe	Met	Gly	Leu	Leu	Ile	Gly	Leu	Thr	Leu	158
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162 Phe Phe Val Ala Asn Ile Ala Gln Ala Val Cys Asp Cys Ile Ser Pr	1335	r cca	tcc	atc		gac	tat	ata	acc		act	ata	aac	acc		+++	ttc	
					-	-	-		-	_	-			-				
	,	FIU	361	116	Cys	295	Cys	Val	Ald	GIII	290	110	ASII	ATG	Val	285	rne	163
	1202								_ 4									
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		315				4	_	GLY	Leu	ттр	Thr		Val	Asp	Phe	Leu	-	
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		) g ccc	Ala 330 cag	Arg ggc	Lys	ttc Phe agc	310 gac Asp	cgg Arg 325 ccc	atg Met gtc	ttt Phe act	ctc Leu tcc	305 ccq Pro	tac Tyr 320 cat	atc Ile	atc Ile ttc	cct Pro	300 aac Asn ggc	167 169 170 171 173
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		) g ccc n Pro	Ala 330 cag Gln	Arg ggc Gly 345	Lys acc Thr	ttc Phe agc Ser	310 gac Asp cgg Arg	cgg Arg 325 ccc Pro	atg Met gtc Val 340	ttt Phe act Thr	ctc Leu tcc Ser	305 ccg Pro gcg Ala	tac Tyr 320 cat His	atc Ile ctg Leu 335	atc Ile ttc Phe	cct Pro agg Arg	300 aac Asn ggc Gly	167 169 170 171 173 174 175
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177 tgc ctc ccc ctc cat gtg gac ctc tca cag cgg tgc cag acc agg cc 178 Cys Leu Pro Leu His Val Asp Leu Ser Gln Arg Cys Gln Thr Arg Pr 179 350 355 360	1527	g ccc n Pro g cct g cct	Ala 330 cag Gln agg Arg	Arg ggc Gly 345 acc Thr	Lys acc Thr cag Gln 360	ttc Phe agc Ser tgc Cys	310 gac Asp cgg Arg	cgg Arg 325 ccc Pro cag Gln	atg Met gtc Val 340 tca Ser	ttt Phe act Thr ctc Leu 355	ctc Leu tcc Ser gac Asp	305 ccq Pro gcq Ala gtg Val	tac Tyr 320 cat His cat	atc Ile ctg Leu 335 ctc Leu	atc Ile ttc Phe ccc Pro 350	cct Pro agg Arg ctc Leu	300 aac Asn ggc Gly tgc Cys	167 169 170 171 173 174 175 177 178
177 tgc ctc ccc ctc cat gtg gac ctc tca cag cgg tgc cag acc agg ccc 178 Cys Leu Pro Leu His Val Asp Leu Ser Gln Arg Cys Gln Thr Arg Pr 179 350 355 360 355 360	1527	g ccc n Pro g cct g cct g Pro	Ala 330 cag Gln agg Arg	Arg ggc Gly 345 acc Thr	Lys acc Thr cag Gln 360 aac	ttc Phe agc Ser tgc Cys	310 gac Asp cgg Arg cgg Arg	cgg Arg 325 ccc Pro cag Gln	atg Met gtc Val 340 tca Ser	ttt Phe act Thr ctc Leu 355 ctg	ctc Leu tcc Ser gac Asp	305 ccg Pro gcq Ala gtg Val	tac Tyr 320 cat His cat	atc Ile ctg Leu 335 ctc Leu	atc Ile ttc Phe ccc Pro 350 cag	cct Pro agg Arg ctc Leu	300 aac Asn ggc Gly tgc Cys cag	167 169 170 171 173 174 175 177 178 179 181
177 tgc ctc ccc ctc cat gtg gac ctc tca cag cgg tgc cag acc agg ccc 178 Cys Leu Pro Leu His Val Asp Leu Ser Gln Arg Cys Gln Thr Arg Pr 179 350 355 360  181 cag ctg cag cag gtg ctc gct ctg cct ctg ccg cca aac tca gat tc 182 Gln Leu Gln Gln Val Leu Ala Leu Pro Leu Pro Pro Asn Ser Asp Se	1527	g ccc n Pro g cct g cct g Pro	Ala 330 cag Gln agg Arg	Arg ggc Gly 345 acc Thr	Lys acc Thr cag Gln 360 aac	ttc Phe agc Ser tgc Cys cca Pro	310 gac Asp cgg Arg cgg Arg	cgg Arg 325 ccc Pro cag Gln	atg Met gtc Val 340 tca Ser	ttt Phe act Thr ctc Leu 355 ctg	ctc Leu tcc Ser gac Asp	305 ccg Pro gcq Ala gtg Val	tac Tyr 320 cat His cat	atc Ile ctg Leu 335 ctc Leu	atc Ile ttc Phe ccc Pro 350 cag	cct Pro agg Arg ctc Leu ctg Leu	300 aac Asn ggc Gly tgc Cys cag	167 169 170 171 173 174 175 177 178 179 181 182
177 tgc ctc ccc ctc cat gtg gac ctc tca cag cgg tgc cag acc agg ccc 178 Cys Leu Pro Leu His Val Asp Leu Ser Gln Arg Cys Gln Thr Arg Pr 179 350 355 360 355 360	1527	g ccc n Pro g cct g cct g Pro	Ala 330 cag Gln agg Arg	Arg ggc Gly 345 acc Thr	Lys acc Thr cag Gln 360 aac	ttc Phe agc Ser tgc Cys cca Pro	310 gac Asp cgg Arg cgg Arg	cgg Arg 325 ccc Pro cag Gln	atg Met gtc Val 340 tca Ser	ttt Phe act Thr ctc Leu 355 ctg	ctc Leu tcc Ser gac Asp	305 ccg Pro gcq Ala gtg Val	tac Tyr 320 cat His cat	atc Ile ctg Leu 335 ctc Leu	atc Ile ttc Phe ccc Pro 350 cag	cct Pro agg Arg ctc Leu ctg Leu	300 aac Asn ggc Gly tgc Cys cag	167 169 170 171 173 174 175 177 178 179 181 182
177 tgc ctc ccc ctc cat gtg gac ctc tca cag cgg tgc cag acc agg ccc 178 Cys Leu Pro Leu His Val Asp Leu Ser Gln Arg Cys Gln Thr Arg Pr 179 350 355 360  181 cag ctg cag cag gtg ctc gct ctg cct ctg ccg cca aac tca gat tc 182 Gln Leu Gln Gln Val Leu Ala Leu Pro Leu Pro Pro Asn Ser Asp Se	1527	g ccc n Pro g cct g Pro tca c Ser	Ala 330 cag Gln agg Arg	arg ggc Gly 345 acc Thr tca Ser	Lys acc Thr cag Gln 360 aac Asn	ttc Phe agc Ser tgc Cys cca Pro 375	310 gac Asp cgg Arg cgg Arg	cgg Arg 325 ccc Pro cag Gln ctg	atg Met gtc Val 340 tca Ser cct Pro	ttt Phe act Thr ctc Leu 355 ctg Leu	ctc Leu tcc Ser gac Asp gct Ala 370	305 ccq Pro gcq Ala gtg Val ctc Leu	tac Tyr 320 cat His cat His gtg Val	atc Ile ctg Leu 335 ctc Leu cag Gln	atc Ile ttc Phe ccc Pro 350 cag Gln	cct Pro agg Arg ctc Leu ctg Leu 365	300 aac Asn ggc Gly tgc Cys cag Gln	167 169 170 171 173 174 175 177 178 179 181 182 183
177 tgc ctc ccc ctc cat gtg gac ctc tca cag cgg tgc cag acc agg ccc 178 Cys Leu Pro Leu His Val Asp Leu Ser Gln Arg Cys Gln Thr Arg Pr 179 350 355 360 355 360 181 cag ctg cag cag gtg ctc gct ctg cct ctg ccg cca aac tca gat tc 182 Gln Leu Gln Gln Val Leu Ala Leu Pro Leu Pro Pro Asn Ser Asp Se 183 365 370 370 375	1527 1575 1623	g ccc n Pro g cct g Pro t tca p Ser	Ala 330 cag Gln agg Arg gat Asp	ggc Gly 345 acc Thr tca Ser	Lys acc Thr cag Gln 360 aac Asn	ttc Phe agc Ser tgc Cys cca Pro 375 ctc	310 gac Asp cgg Arg cgg Arg ccg Pro cag	cgg Arg 325 ccc Pro cag Gln ctg Leu	atg Met gtc Val 340 tca Ser cct Pro	ttt Phe act Thr ctc Leu 355 ctg Leu	ctc Leu tcc Ser gac Asp gct Ala 370 acc	305 ccq Pro gcq Ala gtg Val ctc Leu	tac Tyr 320 cat His cat His gtg Val	atc Ile ctg Leu 335 ctc Leu cag Gln	atc Ile ttc Phe ccc Pro 350 cag Gln	cct Pro agg Arg ctc Leu ctg Leu 365	300 aac Asn ggc Gly tgc Cys cag Gln gac	167 169 170 171 173 174 175 177 178 179 181 182 183 185
177       tge       cte       cce       cte       cat       gtg       gac       ctc       tca       cag       cgg       tge       cag       cgg       tca       cag       cgg       c	1527 1575 1623	g ccc n Pro g cct g Pro t tca p Ser	Ala 330 cag Gln agg Arg gat Asp	ggc Gly 345 acc Thr tca Ser	Lys acc Thr cag Gln 360 aac Asn	ttc Phe agc Ser tgc Cys cca Pro 375 ctc	310 gac Asp cgg Arg cgg Arg ccg Pro cag Gln	cgg Arg 325 ccc Pro cag Gln ctg Leu	atg Met gtc Val 340 tca Ser cct Pro	ttt Phe act Thr ctc Leu 355 ctg Leu	ctc Leu tcc Ser gac Asp gct Ala 370 acc	305 ccq Pro gcq Ala gtg Val ctc Leu	tac Tyr 320 cat His cat His gtg Val	atc Ile ctg Leu 335 ctc Leu cag Gln	atc Ile ttc Phe ccc Pro 350 cag Gln	cct Pro agg Arg ctc Leu ctg Leu 365	300 aac Asn ggc Gly tgc Cys cag Gln gac Asp	167 169 170 171 173 174 175 177 178 179 181 182 183 185
177         tge         cte         cce         cte         gae         ctc         tca         cag         cgg         cag         cgg         tca         cag         cgg         cag         cgg         cgg         cag         cag <td>1527 1575 1623</td> <td>g ccc g cct g cct g Pro tca s Ser g ctt Leu 395</td> <td>Ala 330 cag Gln agg Arg gat Asp cag Gln</td> <td>ggc Gly 345 acc Thr tca Ser gcc Ala</td> <td>Lys acc Thr cag Gln 360 aac Asn aca</td> <td>ttc Phe agc Ser tgc Cys cca Pro 375 ctc Leu</td> <td>310 gac Asp cgg Arg cgg Arg ccg Pro cag Gln 390</td> <td>cgg Arg 325 ccc Pro cag Gln ctg Leu</td> <td>atg Met gtc Val 340 tca Ser cct Pro</td> <td>ttt Phe act Thr ctc Leu 355 ctg Leu tcg Ser</td> <td>ctc Leu tcc Ser gac Asp gct Ala 370 acc Thr</td> <td>305 ccq Pro gcq Ala gtg Val ctc Leu ggc Gly 385</td> <td>tac Tyr 320 cat His cat His gtg Val</td> <td>atc Ile ctg Leu 335 ctc Leu cag Gln tca Ser</td> <td>atc Ile ttc Phe ccc Pro 350 cag Gln gct Ala</td> <td>cct Pro agg Arg ctc Leu ctg Leu 365 tcc Ser</td> <td>300 aac Asn ggc Gly tgc Cys cag Gln gac Asp 380</td> <td>167 169 170 171 173 174 175 177 178 179 181 182 183 185 186 187</td>	1527 1575 1623	g ccc g cct g cct g Pro tca s Ser g ctt Leu 395	Ala 330 cag Gln agg Arg gat Asp cag Gln	ggc Gly 345 acc Thr tca Ser gcc Ala	Lys acc Thr cag Gln 360 aac Asn aca	ttc Phe agc Ser tgc Cys cca Pro 375 ctc Leu	310 gac Asp cgg Arg cgg Arg ccg Pro cag Gln 390	cgg Arg 325 ccc Pro cag Gln ctg Leu	atg Met gtc Val 340 tca Ser cct Pro	ttt Phe act Thr ctc Leu 355 ctg Leu tcg Ser	ctc Leu tcc Ser gac Asp gct Ala 370 acc Thr	305 ccq Pro gcq Ala gtg Val ctc Leu ggc Gly 385	tac Tyr 320 cat His cat His gtg Val	atc Ile ctg Leu 335 ctc Leu cag Gln tca Ser	atc Ile ttc Phe ccc Pro 350 cag Gln gct Ala	cct Pro agg Arg ctc Leu ctg Leu 365 tcc Ser	300 aac Asn ggc Gly tgc Cys cag Gln gac Asp 380	167 169 170 171 173 174 175 177 178 179 181 182 183 185 186 187
177         tge         cte         cce         cte         cat         ggg         ctc         tca         cgg         tgg         cce         cag         cgg         cgg         tgg         cgg         cgg         tgg         cgg         cgg <td>1527 1575 1623 1671</td> <td>g ccc g cct g cct g Pro tca Ser g ctt Leu 395 g gcc</td> <td>Ala 330 cag Gln agg Arg gat Asp cag Gln agg</td> <td>ggc Gly 345 acc Thr tca Ser gcc Ala</td> <td>Lys acc Thr cag Gln 360 aac Asn aca Thr</td> <td>ttc Phe agc Ser tgc Cys cca Pro 375 ctc Leu</td> <td>310 gac Asp cgg Arg ccg Pro cag Gln 390 ccg</td> <td>cgg Arg 325 ccc Pro cag Gln ctg Leu ctg</td> <td>atg Met gtc Val 340 tca Ser cct Pro ggc Gly</td> <td>ttt Phe act Thr ctc Leu 355 ctg Leu tcg Ser</td> <td>ctc Leu tcc Ser gac Asp gct Ala 370 acc Thr</td> <td>305 ccg Pro gcq Ala gtg Val ctc Leu ggc Gly 385 gcc</td> <td>tac Tyr 320 cat His cat His gtg Val ggg Gly</td> <td>atc Ile ctg Leu 335 ctc Leu cag Gln tca Ser gga</td> <td>atc Ile ttc Phe ccc Pro 350 cag Gln gct Ala</td> <td>cct Pro agg Arg ctc Leu ctg Leu 365 tcc Ser</td> <td>300 aac Asn ggc Gly tgc Cys cag Gln gac Asp 380 ctg</td> <td>167 169 170 171 173 174 175 177 178 179 181 182 183 185 186 187</td>	1527 1575 1623 1671	g ccc g cct g cct g Pro tca Ser g ctt Leu 395 g gcc	Ala 330 cag Gln agg Arg gat Asp cag Gln agg	ggc Gly 345 acc Thr tca Ser gcc Ala	Lys acc Thr cag Gln 360 aac Asn aca Thr	ttc Phe agc Ser tgc Cys cca Pro 375 ctc Leu	310 gac Asp cgg Arg ccg Pro cag Gln 390 ccg	cgg Arg 325 ccc Pro cag Gln ctg Leu ctg	atg Met gtc Val 340 tca Ser cct Pro ggc Gly	ttt Phe act Thr ctc Leu 355 ctg Leu tcg Ser	ctc Leu tcc Ser gac Asp gct Ala 370 acc Thr	305 ccg Pro gcq Ala gtg Val ctc Leu ggc Gly 385 gcc	tac Tyr 320 cat His cat His gtg Val ggg Gly	atc Ile ctg Leu 335 ctc Leu cag Gln tca Ser gga	atc Ile ttc Phe ccc Pro 350 cag Gln gct Ala	cct Pro agg Arg ctc Leu ctg Leu 365 tcc Ser	300 aac Asn ggc Gly tgc Cys cag Gln gac Asp 380 ctg	167 169 170 171 173 174 175 177 178 179 181 182 183 185 186 187
177         tge         cte         cce         cte         cat         gge         ctc         tca         cgg         tgg         cag         cgg         tgg         cgg         tgg         cgg         tgg         tgg         cgg         cgg <td>1527 1575 1623 1671</td> <td>g ccc g cct g cct g cct g Pro tca Ser g ctt Leu 395 g gcc</td> <td>Ala 330 cag Gln agg Arg gat Asp cag Gln agg Arg</td> <td>ggc Gly 345 acc Thr tca Ser gcc Ala</td> <td>Lys acc Thr cag Gln 360 aac Asn aca Thr</td> <td>ttc Phe agc Ser tgc Cys cca Pro 375 ctc Leu</td> <td>310 gac Asp cgg Arg ccg Pro cag Gln 390 ccg</td> <td>cgg Arg 325 ccc Pro cag Gln ctg Leu ctg Leu</td> <td>atg Met gtc Val 340 tca Ser cct Pro ggc Gly</td> <td>ttt Phe act Thr ctc Leu 355 ctg Leu tcg Ser</td> <td>ctc Leu tcc Ser gac Asp gct Ala 370 acc Thr</td> <td>305 ccg Pro gcq Ala gtg Val ctc Leu ggc Gly 385 gcc</td> <td>tac Tyr 320 cat His cat His gtg Val ggg Gly</td> <td>atc Ile ctg Leu 335 ctc Leu cag Gln tca Ser gga</td> <td>atc Ile ttc Phe ccc Pro 350 cag Gln gct Ala</td> <td>cct Pro agg Arg ctc Leu ctg Leu 365 tcc Ser</td> <td>300 aac Asn ggc Gly tgc Cys cag Gln gac Asp 380 ctg</td> <td>167 169 170 171 173 174 175 177 178 179 181 182 183 185 186 187 189</td>	1527 1575 1623 1671	g ccc g cct g cct g cct g Pro tca Ser g ctt Leu 395 g gcc	Ala 330 cag Gln agg Arg gat Asp cag Gln agg Arg	ggc Gly 345 acc Thr tca Ser gcc Ala	Lys acc Thr cag Gln 360 aac Asn aca Thr	ttc Phe agc Ser tgc Cys cca Pro 375 ctc Leu	310 gac Asp cgg Arg ccg Pro cag Gln 390 ccg	cgg Arg 325 ccc Pro cag Gln ctg Leu ctg Leu	atg Met gtc Val 340 tca Ser cct Pro ggc Gly	ttt Phe act Thr ctc Leu 355 ctg Leu tcg Ser	ctc Leu tcc Ser gac Asp gct Ala 370 acc Thr	305 ccg Pro gcq Ala gtg Val ctc Leu ggc Gly 385 gcc	tac Tyr 320 cat His cat His gtg Val ggg Gly	atc Ile ctg Leu 335 ctc Leu cag Gln tca Ser gga	atc Ile ttc Phe ccc Pro 350 cag Gln gct Ala	cct Pro agg Arg ctc Leu ctg Leu 365 tcc Ser	300 aac Asn ggc Gly tgc Cys cag Gln gac Asp 380 ctg	167 169 170 171 173 174 175 177 178 179 181 182 183 185 186 187 189
177         tgc         ctc         ccc         ctc         ggc         ctc         tca         cgg         tgg         ggc         ctc         tca         cgg         tgg         cgg         tgg         tgg <td>1527 1575 1623 1671</td> <td>g ccc n Pro g cct g Pro t tca b Ser g ctt 1 Leu 395 g gcc g Ala</td> <td>Ala 330 cag Gln agg Arg gat Asp cag Gln agg Arg</td> <td>arg ggc Gly 345 acc Thr tca Ser gcc Ala acc Thr</td> <td>Lys acc Thr cag Gln 360 aac Asn aca Thr</td> <td>ttc Phe agc Ser tgc Cys cca Pro 375 ctc Leu</td> <td>310 gac Asp cgg Arg cgg Arg ccg Pro cag Gln 390 ccg</td> <td>cgg Arg 325 ccc Pro cag Gln ctg Leu ctg Leu</td> <td>atg Met gtc Val 340 tca Ser cct Pro ggc Gly gac Asp</td> <td>ttt Phe act Thr ctc Leu 355 ctg Leu tcg Ser</td> <td>ctc Leu tcc Ser gac Asp gct Ala 370 acc Thr</td> <td>305 ccg Pro gcq Ala gtg Val ctc Leu ggc Gly 385 gcc Ala</td> <td>tac Tyr 320 cat His cat His gtg Val ggg Gly gag Glu 400</td> <td>atc Ile ctg Leu 335 ctc Leu cag Gln tca Ser</td> <td>atc Ile ttc Phe ccc Pro 350 cag Gln gct Ala cct Pro</td> <td>cct Pro agg Arg ctc Leu ctg Leu 365 tcc Ser ctg Leu</td> <td>300 aac Asn ggc Gly tgc Cys cag Gln gac Asp 380 ctg Leu</td> <td>167 169 170 171 173 174 175 177 178 179 181 182 183 185 186 187 190</td>	1527 1575 1623 1671	g ccc n Pro g cct g Pro t tca b Ser g ctt 1 Leu 395 g gcc g Ala	Ala 330 cag Gln agg Arg gat Asp cag Gln agg Arg	arg ggc Gly 345 acc Thr tca Ser gcc Ala acc Thr	Lys acc Thr cag Gln 360 aac Asn aca Thr	ttc Phe agc Ser tgc Cys cca Pro 375 ctc Leu	310 gac Asp cgg Arg cgg Arg ccg Pro cag Gln 390 ccg	cgg Arg 325 ccc Pro cag Gln ctg Leu ctg Leu	atg Met gtc Val 340 tca Ser cct Pro ggc Gly gac Asp	ttt Phe act Thr ctc Leu 355 ctg Leu tcg Ser	ctc Leu tcc Ser gac Asp gct Ala 370 acc Thr	305 ccg Pro gcq Ala gtg Val ctc Leu ggc Gly 385 gcc Ala	tac Tyr 320 cat His cat His gtg Val ggg Gly gag Glu 400	atc Ile ctg Leu 335 ctc Leu cag Gln tca Ser	atc Ile ttc Phe ccc Pro 350 cag Gln gct Ala cct Pro	cct Pro agg Arg ctc Leu ctg Leu 365 tcc Ser ctg Leu	300 aac Asn ggc Gly tgc Cys cag Gln gac Asp 380 ctg Leu	167 169 170 171 173 174 175 177 178 179 181 182 183 185 186 187 190
177         tge         cte         cce         cte         cat         gge         ctc         tca         cgg         tgg         cat         cgg         tgg         cgg         tgg         cgg         tgg         cgg         cgg         tgg         cgg         ccg         cgg         cgg         cgg         cgg         cgg         ccg         cgg         cgg         cgg         cgg         ccg         cgg         cgg         cgg         cgg         ccg         cgg         ccg         ccg         ccg         ccg <td>1527 1575 1623 1671</td> <td>g ccc n Pro g cct g Pro t ca s Ser g ctt n Leu 395 g gcc g Ala</td> <td>Ala 330 cag Gln agg Arg gat Asp cag Gln agg 410 gag</td> <td>arg ggc Gly 345 acc Thr tca Ser gcc Ala acc Thr</td> <td>Lys acc Thr cag Gln 360 aac Asn aca Thr ccc Pro</td> <td>ttc Phe agc Ser tgc Cys cca Pro 375 ctc Leu cca Pro gtg</td> <td>310 gac Asp cgg Arg ccg Pro cag Gln 390 ccg Pro tct</td> <td>cgg Arg 325 ccc Pro cag Gln ctg Leu ctg Leu</td> <td>atg Met gtc Val 340 tca Ser cct Pro ggc Gly gac Asp</td> <td>ttt Phe act Thr ctc Leu 355 ctg Leu tcg Ser cgg Arg</td> <td>ctc Leu tcc Ser gac Asp gct Ala 370 acc Thr</td> <td>305 ccg Pro gcq Ala gtg Val ctc Leu ggc Gly 385 gcc Ala</td> <td>tac Tyr 320 cat His cat His gtg Val ggg Gly gag Glu 400 aac</td> <td>atc Ile ctg Leu 335 ctc Leu cag Gln tca Ser gga Gly gtc</td> <td>atc Ile ttc Phe ccc Pro 350 cag Gln gct Ala cct Pro gtg</td> <td>cct Pro agg Arg ctc Leu ctg Leu 365 tcc Ser ctg Leu</td> <td>300 aac Asn ggc Gly tgc Cys cag Gln gac Asp 380 ctg Leu acc</td> <td>167 169 170 171 173 174 175 177 178 179 181 182 183 185 186 187 190 191</td>	1527 1575 1623 1671	g ccc n Pro g cct g Pro t ca s Ser g ctt n Leu 395 g gcc g Ala	Ala 330 cag Gln agg Arg gat Asp cag Gln agg 410 gag	arg ggc Gly 345 acc Thr tca Ser gcc Ala acc Thr	Lys acc Thr cag Gln 360 aac Asn aca Thr ccc Pro	ttc Phe agc Ser tgc Cys cca Pro 375 ctc Leu cca Pro gtg	310 gac Asp cgg Arg ccg Pro cag Gln 390 ccg Pro tct	cgg Arg 325 ccc Pro cag Gln ctg Leu ctg Leu	atg Met gtc Val 340 tca Ser cct Pro ggc Gly gac Asp	ttt Phe act Thr ctc Leu 355 ctg Leu tcg Ser cgg Arg	ctc Leu tcc Ser gac Asp gct Ala 370 acc Thr	305 ccg Pro gcq Ala gtg Val ctc Leu ggc Gly 385 gcc Ala	tac Tyr 320 cat His cat His gtg Val ggg Gly gag Glu 400 aac	atc Ile ctg Leu 335 ctc Leu cag Gln tca Ser gga Gly gtc	atc Ile ttc Phe ccc Pro 350 cag Gln gct Ala cct Pro gtg	cct Pro agg Arg ctc Leu ctg Leu 365 tcc Ser ctg Leu	300 aac Asn ggc Gly tgc Cys cag Gln gac Asp 380 ctg Leu acc	167 169 170 171 173 174 175 177 178 179 181 182 183 185 186 187 190 191
177 tgc ctc ccc ctc cat gtg gac ctc tca cag cgg tgc cag acc agg ccc 178 Cys Leu Pro Leu His Val Asp Leu Ser Gln Arg Cys Gln Thr Arg Pro 179	1527 1575 1623 1671	g ccc n Pro g cct g Pro t ca s Ser g ctt n Leu 395 g gcc g Ala	Ala 330 cag Gln agg Arg gat Asp cag Gln agg 410 gag	ggc Gly 345 acc Thr tca Ser gcc Ala acc Thr	Lys acc Thr cag Gln 360 aac Asn aca Thr ccc Pro	ttc Phe agc Ser tgc Cys cca Pro 375 ctc Leu cca Pro gtg	310 gac Asp cgg Arg ccg Pro cag Gln 390 ccg Pro tct	cgg Arg 325 ccc Pro cag Gln ctg Leu ctg Leu	atg Met gtc Val 340 tca Ser cct Pro ggc Gly gac Asp	ttt Phe act Thr ctc Leu 355 ctg Leu tcg Ser cgg Arg	ctc Leu tcc Ser gac Asp gct Ala 370 acc Thr	305 ccg Pro gcq Ala gtg Val ctc Leu ggc Gly 385 gcc Ala	tac Tyr 320 cat His cat His gtg Val ggg Gly gag Glu 400 aac	atc Ile ctg Leu 335 ctc Leu cag Gln tca Ser gga Gly gtc Val	atc Ile ttc Phe ccc Pro 350 cag Gln gct Ala cct Pro gtg	cct Pro agg Arg ctc Leu ctg Leu 365 tcc Ser ctg Leu	300 aac Asn ggc Gly tgc Cys cag Gln gac Asp 380 ctg Leu acc	167 169 170 171 173 174 175 177 178 179 181 182 183 185 186 187 190 191 193
177 tgc ctc ccc ctc cat gtg gac ctc tca cag cgg tgc cag acc agg ccc 178 Cys Leu Pro Leu His Val Asp Leu Ser Gln Arg Cys Gln Thr Arg Pro 179	1527 1575 1623 1671 1719	g ccc n Pro g cct g Pro t ca p Ser g ctt n Leu 395 g gcc g Ala ) g ata n Ile	Ala 330 cag Gln agg Arg gat Asp cag Gln agg 410 gag Glu	ggc Gly 345 acc Thr tca Ser gcc Ala acc Thr cct Pro 425	Lys acc Thr cag Gln 360 aac Asn aca Thr ccc Pro gag Glu	ttc Phe agc Ser tgc Cys cca Pro 375 ctc Leu cca Pro gtg Val	310 gac Asp cgg Arg cgg Pro cag Gln 390 ccg Pro tct Ser	cgg Arg 325 ccc Pro cag Gln ctg Leu ctg Leu ccc Pro 405 gac Asp	atg Met gtc Val 340 tca Ser cct Pro ggc Gly gac Asp aca Thr 420	ttt Phe act Thr ctc Leu 355 ctg Leu tcg Ser cgg Arg gtc Val	ctc Leu tcc Ser gac Asp gct Ala 370 acc Thr aca Thr	305 ccg Pro gcq Ala gtg Val ctc Leu ggc Gly 385 gcc Ala ttc Phe	tac Tyr 320 cat His cat His gtg Val ggg Gly gag Glu 400 aac Asn	atc Ile ctg Leu 335 ctc Leu cag Gln tca Ser gga Gly gtc Val 415	atc Ile ttc Phe ccc Pro 350 cag Gln gct Ala cct Pro gtg Val	cct Pro agg Arg ctc Leu ctg Leu 365 tcc Ser ctg Leu	300 aac Asn ggc Gly tgc Cys cag Gln gac Asp 380 ctg Leu acc Thr	167 169 170 171 173 174 175 177 178 179 181 182 183 185 186 187 190 191 193 194 195
177 tgc ctc ccc ctc cat gtg gac ctc tca cag cgg tgc cag acc agg ccc 178 Cys Leu Pro Leu His Val Asp Leu Ser Gln Arg Cys Gln Thr Arg Pro 179	1527 1575 1623 1671	g ccc n Pro g cct g Pro t ca p Ser g ctt n Leu 395 g gcc g Ala ) g ata n Ile	Ala 330 cag Gln agg Arg gat Asp cag Gln agg 410 gag Glu	ggc Gly 345 acc Thr tca Ser gcc Ala acc Thr cct Pro 425	Lys acc Thr cag Gln 360 aac Asn aca Thr ccc Pro gag Glu	ttc Phe agc Ser tgc Cys cca Pro 375 ctc Leu cca Pro gtg Val	310 gac Asp cgg Arg cgg Pro cag Gln 390 ccg Pro tct Ser	cgg Arg 325 ccc Pro cag Gln ctg Leu ctg Leu ccc Pro 405 gac Asp	atg Met gtc Val 340 tca Ser cct Pro ggc Gly gac Asp aca Thr 420 gtg	ttt Phe act Thr ctc Leu 355 ctg Leu tcg Ser cgg Arg gtc Val ccc	ctc Leu tcc Ser gac Asp gct Ala 370 acc Thr aca Thr	305 ccg Pro gcq Ala gtg Val ctc Leu ggc Gly 385 gcc Ala ttc Phe	tac Tyr 320 cat His cat His gtg Val ggg Gly gag Glu 400 aac Asn	atc Ile ctg Leu 335 ctc Leu cag Gln tca Ser gga Gly gtc Val 415 cca	atc Ile ttc Phe ccc Pro 350 cag Gln gct Ala cct Pro ytq Val cat	cct Pro agg Arg ctc Leu ctg Leu 365 tcc Ser ctg Leu	300 aac Asn ggc Gly tgc Cys cag Gln gac Asp 380 ctg Leu acc Thr	167 169 170 171 173 174 175 177 178 179 181 182 183 185 186 187 190 191 193 194 195

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/829,631

DATE: 04/23/2001 TIME: 13:40:58

Input Set : A:\NIH047.1CP1C1.txt

Output Set: N:\CRF3\04232001\I829631.raw

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201	cat	cattggagge cacatteeeg gageteteag eccaetetee etgagaetag gaggtggtag										1829					
202	gto	gtstsetgag agtgtgetga attgaggtat eteagetage ceatettetg etgeagstee 18												1889			
203	ttg	ttgactgagg ggtagtcaga cacat 1914													1914		
205	-121	0 > S	EQ II	D NO	: 8												
206	21.	1> L	ENGT:	H: 40	37												
20.7	<:21	2 > T	YPE:	PRT													
208	· 21	3 > 0	RGAN	ISM:	Rat												
210	-:40	0 → S	EQUE:	NCE:	8												
23.1	Met	Val	Pro	$\operatorname{Glu}$	Pro	Gly	Pro	Val	Asn	Ser	Ser	Thr	Pro	Ala	Trp	Gly	
100	1				5					10					15		
21.	Pro	Gly	Pro	Pro	Pro	Ala	Pro	Gly	Gly	Ser	Gly	Trp	Val	Ala	Ala	Ala	
214				20					25					30			
315	Leu	Cys	Val	Val	Ile	Val	Leu	Thr	Ala	Ala	Ala	Asn	Ser	Leu	Leu	Ile	
216			35					40					<b>4</b> 5				
	Val		He	Cys	Thr	Gln		Ala	Val	Arg	Asn		Ser	Asn	Ph⊖	Phe	
218		50					55					60					
		Val	Ser	Leu	Phe		Ser	Asp	Leu	Met		Gly	Leu	Val	Val		
220						70	_				75					8:)	
	Pro	Pro	Ala	Met		Asn	Ala	Leu	Tyr		Arg	Trp	Val	Leu	Ala	Arg	
222		_	_		85	_			- 1	90			_	_	95		
	GLY	Leu	Cys		Leu	Trp	Thr	A⊥a		Asp	Val	Met	Cys	_	Ser	A.a	
224		<b>T</b> 1	-	100			Ţ.	<b>-1</b> .	105	<b>.</b> .	•			110	T	T 1 -	
	ser	TTE		Asn	Leu	Cys	Leu		Ser	Leu	Asp	Arg	_	Leu	Leu	rre	
326	T	C	115	T	7	m	T	120	3 · · · ~	Mat	mba	7. l a	125	7 ~~~	7. 1 ·s	7	
228	1.48 C	1.30	PIO	:.eu	Arg	тут	135	Leu	Arg	мес	1111	140	PIO	AIG	Ala	Leu	
	λla		т' а	LOU	Clv	λla		Sar	Lou	Δla	Λla		Δla	Sar	Phe	11هـ. آ	
	145	11C C	.1.0	u	Ory	150	111	JUI	БСи	nia	155	БСи	711.u	DCI	LILC	160	
		Leu	Leu	Leu	Glv		His	Glu	Leu	Glv		Ala	Ara	Thr	Pro		
232					165	•				170	-		,		175		
233	Pro	Gly	Gln	Cys	Arg	Leu	Leu	Ala	Ser	Leu	Pro	Phe	Val	Leu	Val	Ala	
234				180					185					190			
235	Ser	Gly	Val	Thr	Phe	Phe	Leu	Pro	Ser	Gly	Ala	Ile	Cys	Phe	Thr	Tyr	
236			195					200					205				
237	Cys	Arg	Ile	Leu	Leu	Ala	Ala	Arg	Lys	Gln	Ala	Val	Gln	Val	Ala	Ser	
238		210					215					220					
239	Leu	Thr	Thr	Gly	Thr	Ala	Gly	Gln	Ala	Leu	Glu	Thr	Leu	Gln	Val	Pro	
	225					230					235					240	
	Arg	Thr	Pro	Arg		Gly	Met	Glu	Ser		Asp	Ser	Arg	Arg	Leu	Ala	
242	_,				245				_	250			_,	_	255		
	Thr	Lys	His		Arg	Lys	Ala	Leu	_	Ala	Ser	Leu	Thr		Gly	lle	
244	_	_	a.,	260	n.)	<b>5</b> 1			265		_	5.1		270		_	
	Leu	Leu	_	Met	Phe	Phe	Val		Trp	Leu	Pro	Phe		Val	Ala	Asn	
246	T 1	. 1	275		,, ,			280	T 1			<b>a</b> 1	285	T) 1-		77. 7	
	116		GIn	Ala	val	cys	_	cys	11e	ser	Pro	_	ьeu	rne	Asp	val	
248	T 0	290	TT 10.50	Tax	C3	m	295	3	Cor	m la sa	Vat	300	Dec	т1-	т1.	m	
250		T 11T.	ττb	ьeu	дтХ	310	суѕ	ASII	ser	T 11T.	мет 315	ASII	P10	116	Ile	320	
<b>2</b> J U	202					210					212					250	

RAW SEQUENCE LISTING DATE: 04/23/2001 TIME: 13:40:58 PATENT APPLICATION: US/09/829,631

Input Set : A:\NIH047.1CP1C1.txt

Output Set: N:\CRF3\04232001\I829631.raw

```
251 Pro Leu Phe Met Arg Asp Phe Lys Arg Ala Leu Gly Arg Phe Leu His
252
                    325
                                        330
253 Alä Ser Thr Val Pro Arg Ser Thr Gly Gln Pro Cys Leu Pro Leu His
254
                340
                                    345
                                                         350
255 Val Asp Leu Ser Gln Arg Cys Gln Thr Arg Pro Gln Leu Gln Gln Val
256
            355
                                360
                                                     365
257 Leu Ala Leu Pro Leu Pro Pro Asn Ser Asp Ser Asp Ser Ala Ser Gly
    370
                            375
                                                380
358
259 Gly Thr Ser Gly Leu Gln Leu Thr Ala Gln Leu Leu Leu Pro Gly Glu
                       390
                                            395
261 Ala Thr Arg Asp Pro Pro Pro Pro Thr Arg Ala Thr Thr Val Val Asn
                          410
                                                            415
262
                   405
263 Phe Phe Val Thr Asp Ser Val Glu Pro Glu Ile Arg Pro His Pro Leu
264
             420
                                  425
265 Ser Ser Pro Val Asn
266
        435
269 :210> SEQ ID NO: 9
270 +:211> LENGTH: 2108
271 -: 212> TYPE: DNA
272 - 213> ORGANISM Rat
274 +:220> FEATURE:
275 + 221 NAME/KEY. CDS
276 \cdot (222 > \text{LOCATION} - (439) \dots (1311)
278 - 221> NAME/KEY: intron
279 -: 222> LOCATION: (1312)...(1505)
281 \prec 221 > NAME/KEY. CDS
282 <222> LOCATION (1506)...(1943)
284 <400> SEQUENCE: 9
285 ecaaccecca egegegacae giggigatei aacgiactea caegeccaec citeigaag 60
28% agactgeece ggeoggaagg egggagtteg geteetgete ceacateece agetgtgeec 120
287 ctagecagga accecacece catettatgg cateceeggt ggeectatte cateceaggg 180
288 eteteateca geoecaaget aactiteatt gaetegteae ateagtaeee eteeceaaae 240
289 ttettaeeeg agtaeteeag gtggeeetge qtaggaggea eeectaeaae teeteeegat 300
290 otottgaaat egetgetega tgaectaaga acceegtttt gecaataeta etetaaggtg 360
291 cagetteett teteeteett tgeetteace etgtacetge agteaceata teeegtettg 420
292 gtootcaaco cagtooco atg gtt ooa gag ooa ggo oot gto aac agt ago
                       Met Val Pro Glu Pro Gly Pro Val Asn Ser Ser
                        1
296 acc coa geo tigo ggt ecc ggg coa dog cot get dog ggg ggd agd ggd -
                                                                       519
297 Thr Pro Ala Trp Gly Pro Gly Pro Pro Pro Ala Pro Gly Gly Ser Gly
298
                1.5
                                     20
300 tgg gtg get gee geg etg tge gtg gte ate gtg etg aca gea gee gee
301 Trp Val Ala Ala Ala Leu Cys Val Val Ile Val Leu Thr Ala Ala Ala
302
             3.0
                                 35
304 aat tog otg otg ato gtg otc att tgc acg cag occ gcc gtg ogc aac
                                                                       615
305 Asn Ser Leu Leu Ile Val Leu Ile Cys Thr Gln Pro Ala Val Arg Asn
                                                 55
                             50
                                                                       663
308 acg tet aac tte ttt etg gtg teg ete tte acg teg gae ttg atg gtg
309 Thr Ser Asn Phe Phe Leu Val Ser Leu Phe Thr Ser Asp Leu Met Val
```



## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.





VERIFICATION SUMMARY

PATENT APPLICATION: US/09/829,631

DATE: 04/23/2001 TIME: 13:40:59

Input Set : A:\NIH047.1CP1C1.txt

Output Set: N:\CRF3\04232001\1829631.raw

L 14 M:270 C: Current Application Number differs, Replaced Current Application Number

L 15 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:508 M:341 W: (46) "n" or "Xaa" used, for SEQ ID# 12 L:509 M:341 W: (46) "n" or "Xaa" used, for SEQ ID# 12 L:609 M:341 W: (46) "n" or "Xaa" used, for SEQ ID# 12 L:634 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 L:684 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13